

**GREEN BOTTOM WILDLIFE MANAGEMENT AREA
HISTORIC PRESERVATION MANAGEMENT PLAN**

December 1990

Prepared by
U.S. Army Corps of Engineers
Huntington District
502 Eight Street
Huntington, West Virginia 25701

TABLE OF CONTENTS

	Page
Executive Summary	1
Project History	2
Environment	4
Culture History	5
Site Descriptions	8
Curation and Collections	17
Buried Sites	17
Management of Archeological Sites	18
Management of the Jenkins House	20
Interpretation	20
Bibliography	22

Appendix I
Figures

Appendix II
Memorandum of Agreement

Appendix III
Memorandum of Understanding

EXECUTIVE SUMMARY

The Green Bottom Wildlife Management Area (GBWMA) contains one National Register structure, the General Albert Gallatin Jenkins House, and six National Register archeological sites. The sites include the Clover Site (46CB40), the Jenkins House Site (46CB41), two Woodland hamlets (46CB15 and 46CB100), a Fort Ancient village (46CB98) and a Late Archaic site (46CB92).

The General Jenkins House is presently occupied by the West Virginia Department of Natural Resources Wildlife Manager and his wife and they will continue to occupy the house during the rehabilitation, which is scheduled for the fall of 1990.

The Clover Site and the Fort Ancient village are the largest and most productive sites. They will be kept in hay to discourage unauthorized collecting and illegal excavation. The Jenkins House Site includes the yard around the Jenkins House. It will be kept in grass and professional archeological excavations will be required if any land alteration is proposed for the area, such as utility lines and plantings of trees and shrubs. The other three National Register sites are low density sites. Plowing will be permitted as long as the Advisory Council's guidelines for plowing sites are observed. The sites will be closely monitored and they may be taken out of agricultural production if cultivation proves to be detrimental to the sites. Cultivation will be permitted on the other recorded sites.

The Jenkins House is still located in the 100-year floodplain and a 100-year flood will inundate the basement up to the first floor. If museum displays are developed for the basement or first floor, a flood evacuation plan will have to be developed.

Interpretive programs will depend on who continues to manage the Jenkins House. A range of interpretive programs are discussed.

In terms of historic and archeological resources, Green Bottom is the most important property owned by the Huntington District. Special care should be taken to insure that these National Register sites are appropriately preserved and managed.

PROJECT HISTORY

The Gallipolis Locks and Dam Replacement Project, as authorized, required mitigation for fish, wildlife, wetland and public use losses. A mitigation plan was jointly developed by the West Virginia Department of Natural Resources, the Fish and Wildlife Service and the Huntington District Corps of Engineers. This plan was provided to the Corps of Engineers and to Congress in the December 1980 Fish and Wildlife Coordination Act Report. A part of the plan recommended the acquisition and management of the Green Bottom Swamp area for wildlife and for hunting and fishing, as well as such uses as bird watching, photography and nature study.

The Report of the Chief of Engineers, dated April 8, 1982, and the Supplemental Report of the Chief of Engineers, dated August 13, 1983, as submitted to Congress, concurred with the proposed mitigation plan and included a recommendation to purchase, enhance and manage the Green Bottom Swamp area. In so doing, the report identified the Green Bottom Swamp as the "most feasible location: for necessary acquisition of mitigation lands and recommended they be acquired to fully mitigate all remaining project wildlife losses."

The Green Bottom Wildlife Management Area (GBWMA) is located sixteen miles north of Huntington, West Virginia, between Route 2 and the Ohio River (Figure 1). It is situated in northern Cabell County, between river miles 286.7 and 290.1, in the Greenup Navigation Pool. The project area includes 836 acres, of which 126 acres are considered high-quality wetlands. The elevation varies from 515 to 558 feet A.M.S.L. Located in the Appalachian Plateau Physiographic Province, the bedrock geology of this area is dominated by Pennsylvanian age sandstones and shales that belong to the Upper Conemaugh and Monongahela Groups.

Fifteen different soil types are present in the GBWMA. The dominant types are Ashton (26.3%), Huntington (21.8%), Melvin (16.6%) and Lindside (10.4%). The Melvin silt loam includes the Green Bottom Swamp and much of the area where new wetlands will be created. The 18 recorded archeological sites are located on Ashton (11), Huntington (5) and Lindside (2) soils. The distribution of soils in the GBWMA by soil type and percent is given in Table 1.

Table 1. Distribution and Percentage of Soil Types in GBWMA.

<u>Soil Type</u>	<u>Acres</u>	<u>Percent in Project</u>	<u>Number of Sites</u>	<u>Percent of Total Sites</u>
Ashton	219.87	26.30%	11	61.11%
Chagrin	28.40	3.40	0	0.00
Chagrin-Melvin	60.19	7.20	0	0.00
Gilpin-Upshur	1.30	0.15	0	0.00
Huntington	182.28	21.80	5	27.78
Kanawha	2.73	0.33	0	0.00
Lindside	86.94	10.40	2	11.11
Markland	8.61	1.03	0	0.00
Melvin	138.77	16.60	0	0.00
Sensabaugh	1.17	0.14	0	0.00
Udorthents	86.19	10.31	0	0.00
Vandalia	13.57	1.62	0	0.00
Wheeling	5.09	0.61	0	0.00
TOTALS	836.00	100.00	18	100.0

The Department of Natural Resources and Corps of Engineers are committed to the protection of the historical and archeological resources of the mitigation area. The Corps of Engineers has signed a Memorandum of Agreement with the West Virginia State Historic Preservation Office and the National Advisory Council on Historic Preservation covering the cultural resources at Green Bottom (Appendix II). This agreement stipulates the following:

- conduction of an archeological and historic survey of the Green Bottom mitigation area;
- preparation of a historical preservation plan for the historic and archeological resources of the mitigation area; and
- rehabilitation of the General Albert Gallatin Jenkins House in accordance with the Secretary of Interior's Standards for Rehabilitation and Guidelines for the Rehabilitation of Historic Buildings.

On February 20, 1989, the Department of Natural Resources signed a 25-year lease with the Corps of Engineers for the management of the GBWMA. Under the terms of the lease, the management of this area will conform to such rules and regulations as may be prescribed by the Secretary of the Army and the Chief of Engineers to govern the public use of the area as well as the provisions of certain other Federal laws. Management will be conducted in consultation

with the master plan for the area, the Corps of Engineers Green Bottom Development Plan, the Green Bottom Management Plan and this Historic Properties Management Plan.

The Department of Natural Resources, Corps of Engineers and the Department of Culture and History signed a Memorandum of Understanding in the spring of 1989 (Appendix II). The Memorandum stipulates the following:

- the Jenkins House and the property immediately surrounding the house should be available for public interpretation;
- the Department of Culture and History can sublease the Jenkins House for restoration and public interpretation;
- the Department of Culture and History will provide a management plan for the Jenkins House to the Corps of Engineers for their approval;
- the Jenkins House will be occupied by Department of Natural Resources until a management plan is approved and the Department of Culture and History can occupy the structure.

ENVIRONMENT

The first evidence of human occupation at Green Bottom is during the Late Pleistocene/Early Holocene period, approximately 10,500 BC. The beginning of the Holocene Age, dated between 10,700 and 9,300 BC, is associated with rapid warming temperatures, decreases in cloud cover and generalized landscape instability. Temperature increases were three times greater than later Holocene fluctuations. Boreal plant species such as fir and spruce rapidly replaced Pleistocene vegetation.

Pleistocene animals such as giant beaver, stag, moose, mammoth, mastodon, horse, giant ground sloth and dire wolf became extinct and were replaced by modern species (Hughes & Niquette 1989).

The climate during the Early Holocene, circa 10,000 to 6,000 BC, was considerably cooler than our modern climate and vegetation at higher elevations was most similar to the Canadian boreal forest region. Conditions at lower elevations like Green Bottom were less severe and favored the transition from boreal to mixed mesophytic forests. Sections of the Gallipolis Locks and Dam pollen core show mixed mesophytic vegetation at 6,500 BC (Fredlund 1989).

Middle Holocene (6,000 to 2,000 BC) climatic conditions were consistently drier and warmer than 20th century conditions. Based on the Gallipolis pollen core, swamps similar to Green Bottom were common in the Ohio River floodplain.

During the first part of the Late Holocene (2,000 to 800 BC) there was increased precipitation and the establishment of essentially modern deciduous forest communities. Beginning around 800 BC, generally warm conditions, probably similar to the 20th century, prevailed until the onset of the Neo-Boreal episode around AD 1300. It is during this episode (800 BC to AD 1300) that many plants were domesticated by Indians in the Ohio Valley. Pollen profiles and wood charcoal from archeological sites show an increase in pine which reflects field clearing for crops.

Studies of historic weather patterns and tree ring data by Fritts, Lofgren and Gordon (1979) have indicated that 20th century climatological averages are unusually mild when compared with 17th to 19th century trends. This study suggests that winters were generally colder, weather anomalies were more common and unusually severe winters were more frequent between 1602 and 1899 than after 1900. These cooler, moister conditions are associated with the Neo-Boreal episode or Little Ice Age which began around AD 1300 and coincided with minor glacial advances in the northwest and Europe.

During the prehistoric and early historic periods wetlands were more extensive. All areas classified as Melvin soils were probably swamps.

Today the GBWMA includes 162 acres of forestlands, 140 acres of wetlands, 518 acres of agricultural land and 16 acres of open water. The area has 30 species of mammals, 107 species of birds, 12 species of amphibians and 5 species of reptiles.

CULTURE HISTORY

The earliest evidence of human occupation at Green Bottom consists of one Clovis fluted point collected at the Clover Village site (Adams 1960:24). These points are representative of the Paleo-Indian period and have been consistently radiocarbon dated in the western United States to 10,500 BC.

Traditional views hold that Paleo-Indians were highly mobile big game hunters who followed herds of mastodon and caribou. Current information from the Shawnee Minisink Site in Monroe County, Pennsylvania, reflected a much different picture. Dent (1981:79) reported that the Paleo-Indian

levels at this site included carbonized seeds such as acalypha, blackberry, chenopod, hawthorn plum, hackberry and grape. The faunal assemblage suggested that these people were heavily dependent on fish.

Between 9000 and 8000 B.C. Clovis points are replaced by a variety of corner-notched and side-notched projectile points such as Thebes and Dovetails. These are exceptionally well made and exhibit heavy grinding on the bases similar to Clovis. They as well as Clovis are made of exotic non-local cherts. Unfortunately there is less known about habitation sites of this period than Clovis.

The Early Archaic Period dates from 8000 to 6000 B.C. and is characterized by broad spectrum hunting and gathering. Indians hunted primarily deer and gathered a variety of nuts, berries and other plants. Projectile points become smaller and have serrated edges. Most Early Archaic projectile points in the areas are made from local Kanawha Black Flint.

The Middle Archaic Period dates from 6000 B.C. to 4000 B.C. It is characterized by increased regionalization and the addition of ground stone tools to the artifact inventory. Ground stone artifacts made by pecking, grinding and polishing include adzes, axes, bannerstones, and pendants. Ground stone tools such as manos, mortars and pestles, and nutting stones are interpreted as plant food processing artifacts and indicate increased use of plant foods.

The Late Archaic Period dates from 4000 B.C. to 1000 B.C. It was a time of population increase with more complex social organization. Several wild plants are domesticated during the Late Archaic. These include East Mexican Agricultural Complex plants such as gourd and squash and Eastern United States Agricultural Complex plants such as lambsquarter, marsh elder and sunflower.

Intensive use of Green Bottom began during the Late Archaic Period about 5000 years ago. A pollen profile from the Gallipolis Locks and Dam indicates that local vegetation disturbances were caused by fire. Historic references indicate that Indians across North America used controlled burning as a land management technique and these practices undoubtedly go back far into prehistory.

The Early Woodland Period dates from 1000 B.C. to 200 B. C. Two major developments include the manufacture of pottery and the construction of burial mounds. While pottery appears to the north and south about 1000 B.C. the earliest pottery in the mid and upper Ohio Valley appears between 400 and 500 B.C. Most Adena burial mounds date between 400 and 200 B.C.

During this period local Indians continued experimenting with plant domestication and several Eastern Agricultural Complex plants such as sunflower, lambsquarter, little barley, smartweed and maygrass were cultivated. Woodland horticulture is also documented in the analysis of charcoal from Woodland pits which shows an increase in pine and other woods that are associated with land clearing.

The Middle Woodland Period (200 B.C. to A. D. 400) is poorly documented at Green Bottom. In Central Ohio, the Hopewell flourished and built numerous large earthworks. In West Virginia the Armstrong culture is dated to Middle Woodland. Indians continued living in scattered hamlets and left no traces of earthworks along the Ohio River. Occasionally mica or prismatic bladelets made of Ohio Flint Ridge flint are found on these sites.

The Late Woodland Period (A.D. 400 to 1200) is well represented at Green Bottom. Seven of the 18 recorded sites at Green Bottom have Late Woodland components and five of the six National Register sites have Late Woodland components. Most Late Woodland Indians continued to live in small hamlets and single family farmsteads. One exception is the Childers Site at the Gallipolis Locks and Dam (Shott 1990) which is an intensively occupied Woodland village. Site 46CB15 at Green Bottom is a hamlet that has a component related to Childers but dates considerably earlier. Other Woodland components at Green Bottom include Woods and Intrusive Mound.

The Late Woodland is a period of transition characterized by population migrations and diffusion of major technological and social innovations. About A.D. 700 the bow and arrow is introduced and is identified by the presence of Jack's Reef and Levanna Triangular projectile points. Shortly thereafter corn is introduced at Woods Phase sites. During most of the period local populations continue living on farmsteads and in small hamlets.

The Late Prehistoric period dates from A.D. 1200 to 1550. By A.D. 1200 Woodland horticulture was replaced by intensive corn agriculture and Woodland hamlets were replaced by large Fort Ancient villages. Principal crops were corn, beans and squash. Diagnostic artifacts include triangular arrow points and shell tempered pottery. One Late Prehistoric village (46CB98) is located at Green Bottom.

The Protohistoric period dates from A.D. 1550 to 1690. Protohistoric refers to the period when Indian villages had access to European trade goods but no direct contact with Europeans. The Clover Village Site dates to approximately A.D. 1600. The Clover Site has some European trade goods and bridges the gap between the prehistoric and historic occupations at Green Bottom.

The first European settler at Green Bottom was Thomas Hannan who settled near the mouth of Guyan Creek in 1796. William A. Jenkins purchased 4,395 acres of the Green Bottom lands in 1825. He built a temporary wooden house on the property while he finished building his large brick house. The brick house was finished in 1835. When William Jenkins died the estate was divided among his three sons. Albert Gallatin Jenkins inherited the house and the eastern third of the estate. Albert Gallatin Jenkins received a law degree from Harvard University and was elected to Congress for two terms. During the Civil War he served as a General in the Confederate Calvary and died on May 21, 1864, from wounds suffered on May 9th during the Battle of Cloyd's Mountain. The General Albert Gallatin Jenkins House is listed on the National Register of Historic Places and is presently used as the residence for the Green Bottom Wildlife Manager.

The Jenkins Estate was in litigation for several decades but during the late 1800's the area continued to develop into prime farmland in Cabell County. The November 7, 1895, Huntington Advertiser ran an article "In Upper Greenbottom, Some of the Garden Spots of Cabell County" which describes the crops of clover, baled straw and corn raised on the three farms that make up the Green Bottom Wildlife Management Area. The article indicates that the McCallister Brothers managed the Hogsett farm just below the mouth of Guyan Creek and had managed to drain the swamps over the past 12 years. This would indicate that the major swamps in the project area were drained between 1883 and 1895.

A photograph taken of the Andrew Beardsley Farm at Green Bottom on December 23, 1906, shows the Jenkins House with the adjacent swamp as an agricultural field (Figure 2). The 1934 Corps of Engineers aerial photograph (Figure 3) clearly shows the drainage tiles and ditch and the area reverting back to wetland. This was the period when the house was occupied by Virginia Jenkins who no longer had the resources to continue farming the area.

SITE DESCRIPTIONS

Site 46CB15

Site 46CB15 (Figure 3) is located on a dredged back channel of the Ohio River at elevation 550' AMSL and is subject to erosion and periodic inundation (Hughes and Niquette 1989:134). The site fronts the river for about 50 m where there is an exposure of fire-cracked rock and eroded river

cobbles. The surface concentration of fire-cracked rock extends away from the river for about 125 m. The site appears to be confined to a slightly elevated area on the first terrace.

Based on the temporally diagnostic artifacts recovered from 46CB15, the site was occupied during the Late Archaic and Late Woodland time periods. The site was more intensively occupied during the Late Woodland period. This was indicated by the predominance of Late Woodland point types such as the Lowe Cluster points, 1 Jack's Reef Corner Notched point and 4 Madison points in addition to the abundant Late Woodland ceramic assemblage. The Late Archaic time period was represented by two Lamoka points and one Buffalo Stemmed Point. Artifacts recovered from the site include 763 prehistoric ceramic sherds, 18 projectile points, 8 bladelets, 1 hafted scraper, 4 pitted stones, 1 celt fragment, 1 hoe, 4 groundstone fragments, 1 hematite fragment and 2 pieces of mica (Hughes and Kerr 1990:127).

Site 46CB40

Site 46CB40, the Clover Site, is a large semicircular Protohistoric village (Figure 4). It is located on a high bank of the Ohio River at elevation 550' AMSL. The maximum dimensions of the site are 160 m north/south and 340 m east/west. The northern edge of Clover has been eroded by the Ohio River and artifacts are occasionally found eroding out of the riverbank. Three mounds on the site were reported in the 1940's but there is hardly any evidence of this today. Griffin (1943) identified the site as being the Clover Component of the Fort Ancient aspect and Clover became the type site for the Clover Complex.

Between 1984 and 1987 Clover was tested by Marshall University's archeological field school (Freidin 1987). Subsurface remains included six burials, post molds and a hearth.

Clover is one of the most important archeological sites in West Virginia and is currently being considered for nomination as a National Historic Landmark. It is being considered in terms of data it is likely to provide in the following categories:

Technology: Clover has potential to yield data in lithic and ceramic technology. The preservation is exceptionally good so many aspects of bone technology and shell technology can be studied. For example, the Clover Collection at the Huntington Galleries has over forty shell hoes that could be studied for wear patterns, hafting techniques and species selection. The collection has bone fish hooks and other bone artifacts in all stages of production.

Social and Political Organization: Artifacts such as the Rattlesnake gorget, brass animal effigies and pottery types show evidence of possible political ties and trade with the central Tennessee area.

Economic Life: The excellent preservation at Clover provides potential to reconstruct prehistoric diets. Carbonized seeds, corn cobs and wood charcoal can be identified in quantities suitable for dietary reconstruction. Faunal analysis can lead to reconstruction of hunting and butchering patterns. Eventually this would lead to inter-site comparisons where agricultural systems, diets, hunting patterns and butchering patterns can be evaluated in terms of different ethnic or tribal groupings and their relationships to the local environment.

Spiritual Life: The Clover Site contains burials complete with burial goods, effigy pots, ornaments and shell gorgets which will give insights into the spiritual life of the village. Reconstruction of burial practices and spiritual life will provide important information for determining the connection between the Protohistoric Clover villages and Historic Indian tribes.

The Arts: Clover offers several opportunities to study the Protohistoric arts which were preserved in pottery, bone, shell, copper and brass. Clover has produced numerous fragments of effigy pots, especially effigy bowls with animal and human figures. Other sites like Buffalo have produced human figures of pottery with characteristic hair styles and tatoos or body paintings. One shell rattlesnake gorget has been found and additional rattlesnake gorgets and weeping eye gorgets can be expected to be recovered from the site. These can be integrated into the stylistic studies of shell artifacts done on other comparable sites in the eastern United States.

Physical Anthropology: Numerous burials can be expected to be recovered from Clover. Detailed descriptive analysis will be necessary to link Clover with Historic Indian tribes. Trace element analysis can be used to reconstruct diet and evaluate the health of the population.

If Clover does not qualify as a National Historic Landmark, it will be nominated to the National Register of Historic Places at a regional level of significance as part of the Green Bottom Multiple Resource Nomination.

46CB41

Site 46CB41 (Figure 4) is a multi-component site located on a second terrace 800 m south of the Ohio River at elevation 550' AMSL. The site includes the historic General Albert Gallatin Jenkins homestead. Maximum dimensions of the site are 100 m north/south and 300 m east/west (Hughes and Niquette 1989:139).

The site was originally described by Wilkins (1974) who excavated a 5 x 10 foot block during a survey made in advance of construction of West Virginia State Route 2. The block was excavated to a depth of 1.5 feet. It produced a low density of cultural artifacts and no features.

Test excavations at the Jenkins House site (Hughes and Niquette 1989) revealed intact historic features. The foundation of the original kitchen was exposed immediately east of the main house. The law office is believed to have been located immediately west of the main house. The foundation could not be located, possibly due to construction of a patio in the mid-20th century. Most historic material recovered was from the nineteenth century. Prehistoric materials recovered from the site consisted of Late Prehistoric pottery types, triangular points and mussel shell. Prehistoric material collected from the site includes 5 Madison projectile points, 1 drill, 23 bifaces, 1 celt, 1 groundstone fragment, 1 bone needle fragment and 534 ceramic sherds. Historic material from the site included ceramic fragments, container and window glass fragments, nails and various other hardware items, brick fragments and mortar fragments (Hughes and Niquette 1989).

The easternmost portion of the site was tested by mechanically excavating one 2.5 x 100 m strip to subsoil (Hughes and Kerr 1990:135).

46CB90

Site 46CB90 is a large multi-component prehistoric site located on a levee at elevation 550' AMSL near the center of the project (Figure 4). The site has a long, linear shape with maximum dimensions of 100 m north/south and 900 m east/west. The site consisted of a light scatter of lithic debitage, tools and a few ceramic sherds. The highest concentration of artifacts were recovered from the western portion and also from the highest portion of the site. The site is bordered on the south by a low, swampy area and on all other sides by a drop in elevation off the edge of the levee.

Temporally diagnostic projectile points recovered include 1 Adena and 1 Adena-like point, 1 Type I triangle, 1 Kramer-like, 1 Lamoka and 1 Merom-Trimble point, suggesting a Late Archaic and Early to Late Woodland/Late Prehistoric occupation of the site. The 5 ceramic sherds, which included siltstone- and sandstone-tempered sherds, suggest a minor Woodland occupation (Hughes and Niquette 1989).

46CB91

This prehistoric site is located on the southern side of a well developed levee at elevation 545' AMSL near the center of the project area immediately west of 46CB90 (Figure 4). It has an oval shape and its maximum dimensions were 60 m north/south and 140 m east/west. The site consisted of a very light scatter of lithic debitage and one biface fragment. The site was bordered on the south by a low, swampy area and by the top of levee to the north. Artifacts collected consisted of 14 flakes and 8 pieces of shatter (Hughes and Niquette 1989).

46CB92

Site 46CB92 consists of a dense scatter of artifacts in a hayfield on a floodplain of the Ohio River at elevation 555' AMSL located at the western end of a levee (Figure 4). The site is bounded by Green Bottom Swamp to the south, a swale 9' lower in elevation to the north and the west and by a lack of artifactual material to the east along the levee. Site 46CB98 is on the same levee and is approximately 100 m to the east of 46CB92. The site is roughly oval in shape with maximum dimensions of 120 m north/south and 160m east/west (Hughes and Niquette 1989; Hughes and Kerr 1990).

Temporally diagnostic artifacts include 4 Madison, 1 Lamoka, 1 Lamoka-like, 1 Bottleneck stemmed, 3 McWhinney Heavy Stemmed, 2 Motley, and 3 Merom-Trimble points and suggest a Late Archaic and Late Woodland/Late Prehistoric occupations. Other artifacts include 1 drill, 43 bifaces, 1 celt, 1 groundstone fragment and 5 ceramic sherds (Hughes and Niquette 1989; Hughes and Kerr 1990).

46CB93

This prehistoric site is located on a well developed levee near the western end of the project area at elevation 545' AMSL (Figure 3). It has an elliptical shape with maximum dimensions of 80 m north/south and 300 m east/west. The site consists of a very light scatter of lithic debitage and 2 biface fragments. It is bordered on all sides by an ap-

proximately 5' drop in elevation off the edge of the levee. No temporally diagnostic artifacts were recovered from this site (Hughes and Niquette 1989).

46CB94

This historic site was located on the southern side of a well developed levee near the center of the project area at elevation 545' AMSL immediately west of 46CB90 (Figure 4). It had an oval shape and had a maximum dimensions of 60 m north/south by 140 m east/west. The site consisted of a very light scatter of historic ceramics, glass and brick fragments. The site was bordered on the south by a low, swampy area and by the top of the levee to the north. The eastern and western boundaries were defined by a lack of recovered materials.

Materials recovered from 46CB94 include historic ceramics, container and window glass and brick fragments (Hughes & Niquette 1989).

46CB95

This historic site is located on the southern side of a well developed levee near the center of the project area at elevation 545' AMSL (Figure 4). The Clover Site (46CB40) is located directly to the north. The site has an oval shape with maximum dimensions of 50 m north/south and 100 m east/west. The site consists of a very light scatter of one historic ceramic sherd and glass fragments. The site is bordered on the south by a low, swampy area and by the top of the levee to the north. The eastern and western boundaries are defined by a lack of artifactual materials (Hughes & Niquette 1989).

46CB96

This historic site is located on the second terrace of the Ohio River at elevation 550' AMSL immediately east of 46CB41, the Jenkins House Site (Figure 4). The site has an oval shape and has maximum dimensions of 60 m north/south by 100 m east/west. The site consists of a very light scatter of historic ceramics, container and window glass, brick fragments and one nail. The site is bordered on the north by the Green Bottom Swamp and by West Virginia State Route 2 to the south. The eastern and western boundaries are defined by lack of recovered materials (Hughes & Niquette 1989). The site is in the approximate location of the barn and machine shop complex shown in the 1906 photograph of Green Bottom (Figure 2).

46CB97

This historic site is located on the second terrace 800 m south of the Ohio River at elevation 550' AMSL and immediately west of 46CB41, the Jenkins House Site (Figure 3). A small, unnamed stream is located between the sites. 46CB97 has an oval shape with maximum dimensions of 60 m north/south by 100 m east/west. The site consisted of very light lithic scatter of one historic ceramic sherd and container, window and brick fragments. The site is bordered on the north by a 5' drop in elevation, to the south by West Virginia State Route 2, to the east by the unnamed creek and to the west by a farm access road (Hughes & Niquette 1989).

46CB98

This large prehistoric site is situated on a levee 200 m south of the Ohio River at elevation 560' AMSL. The site is generally linear in shape and follows the contour of the levee (Figure 4). The Clover Site (46CB40) is located immediately to the north. The results of radiocarbon testing at the site (A.D. 1305+/-80) indicate that 46CB98 was occupied considerably earlier than Clover. Maximum dimensions of the site are 350 m northeast/southwest and 100 m northwest/southeast. The site is bordered on the south by a 15-20 ft. drop in elevation to the Green Bottom Swamp, to the north and to the east by a 5 ft swale and to the west by a drop in artifact density. Site 46CB92 is located 100 m west at the extreme western edge of the levee.

Three 2 x 2 m test units were excavated at 46CB98 and produced several different types of features, including burials, circular basins, compound basins, cylindrical pits, looter's pits and post molds. Temporally diagnostic artifacts recovered indicate that this site was probably occupied during the Late Archaic, Middle Woodland and Late Woodland/Late Prehistoric periods and include 21 Madison points, 2 Adena points, 3 Merom-Trimble points, 1 Lamoka, 1 McWhinney heavy stemmed, 1 Karnak stemmed, and 1 Kanawha stemmed point, 47 biface fragments, 5 hammerstones, 4 pitted stones, 1 hoe, 3 modified hematite and 321 prehistoric ceramic sherds (Hughes & Niquette 1989; Hughes & Kerr 1990).

46CB99

Site 46CB99 is located on a floodplain of the Ohio River at elevation 550' AMSL immediately east and adjacent to the Clover Site (Figure 4). The site is quite large (110,000 m²) and oval in shape. Maximum dimensions of the site are 200 m north/south and 550 m east/west. The site is

bordered on the south by a 15-20' drop in elevation to the Green Bottom Swamp, to the north by the Ohio River and to the east by a drop in artifact density.

Temporally diagnostic artifacts recovered indicate that the site was occupied during the Early Archaic, Late Archaic, Early Woodland and Late Prehistoric periods. Both shell and siltstone tempered ceramics were recovered. Artifacts collected include 4 Madison, 1 Saratoga expanding stem, 1 Lamoka, 1 Merom-Trimble and 1 Kanawha stemmed point, 31 bifaces, 1 thumbnail scraper, 1 hammerstone, 1 axe fragment and 9 prehistoric ceramic sherds. Historic materials include 1 ceramic sherd along with window and container glass fragments (Hughes & Niquette 1989; Hughes & Kerr 1990).

46CB100

This prehistoric and historic open site is located on a levee of the Ohio River that abuts an unnamed stream which transects the floodplain at elevation 548' AMSL (Figure 3). The crest of the levee is cut by a farm road which contained most of the cultural material. The eastern portion of the site, near the unnamed stream, contained the highest artifact density.

Phase II testing of 46CB100 includes the excavations of three 2 x 2 m units and two mechanically stripped transects, revealing a variety of features, including circular basins, ovoid basins, bell-shaped pits and post molds.

The prehistoric temporally diagnostic artifacts indicated that this site was used/occupied during the Late Woodland and Late Archaic periods. It appeared that this site was most intensively occupied during the Late Woodland Period. This was indicated by the presence of six Madison type projectile points, one Chesser/Lowe cluster point and the predominance of Late Woodland pottery. Only one Late Archaic projectile point type, Karnak Stemmed, was recovered from the site. Additionally, the presence of a small sample of thick pottery may possibly be reminiscent of Early Woodland pottery; however, there was not enough evidence to positively identify these sherds as belonging to the Early Woodland period. Non-diagnostic cultural material recovered included two, unidentified pieces of animal bone (recovered from a shovel test), 13 biface fragments, 194 flakes and pieces of chert shatter, two marginally modified flakes, a hammerstone and one piece of groundstone, quite possibly a mano fragment. The historic component appears to date to the 19th century and is represented by plain and decorated (violet transfer print) whiteware, stoneware, buff body earthenware, container glass and window glass. Radiocarbon

testing from the site produced a date of AD 680+/-70 which corresponds well with the Late Woodland pottery from the site (Hughes & Niquette 1989; Hughes & Kerr 1990).

46CB101

Site 46CB101 is a small prehistoric site located on a terrace adjacent to the Ohio River at elevation 540' AMSL (Figure 3). The site consists of a light lithic scatter in an area 20 m in diameter (Hughes & Niquette 1989).

46CB102

This prehistoric open site is located on a levee immediately south of the Ohio River at elevation 546-551' AMSL and immediately east of site 46CB99 (Figure 4). Artifacts recovered include 1 Early Archaic point, 1 abrading stone, a pitted cobble, 2 bifaces and 12 flakes. The entire site area is littered heavily with river cobbles and fire-cracked rock (Hughes & Niquette 1989).

46CB103

Site 46CB103 is an early 19th century Euro-American farmstead located on the left bank of Guyan Creek at its confluence with the Ohio River at elevation 552' AMSL (Figure 4). The site consists of a dense scatter of bricks and kitchen group artifacts. The site is believed to date to the 1830's or 1840's. Historic artifacts recovered include whiteware, pearlware, redware, and stoneware ceramics, container glass and brick. The Phase II investigation at 46CB103 was initiated by conducting a proton magnetometer survey in order to help determine the appropriate placement of three 2 x 2 square meter test units (Figure 30). A 40 x 40 square meter area was magnetically surveyed in a 1 meter grid interval. This parcel was located in an area with a high density of historic materials on the surface. The magnetometer survey did not clearly reveal any features such as privies, wells, cisterns or foundations; however, three areas which exhibited magnetic anomalies were chosen for unit placement. None of the units exposed any of the features mentioned above. In addition, there did not appear to be intact deposits below the plow zone. A small amount of prehistoric material was also recovered, including 1 triangular arrow point, 1 biface fragment, 1 piece of chert shatter, 1 secondary flake and 3 Late Woodland ceramic sherds (Hughes & Niquette 1989; Hughes & Kerr 1990).

46CB104

Site 46CB104 is a very light scatter of prehistoric material located on a terrace just south of the Ohio River at elevation 551' AMSL (Figure 4). The site yielded 2 pieces of chert shatter and 2 flakes (Hughes & Niquette 1989).

CURATION AND COLLECTIONS

Artifacts collected during the U.S. Army Corps of Engineers archeological survey and testing are curated at the Blennerhassett Historical Park Commission in Parkersburg, West Virginia. The Huntington Museum of Art, Huntington, West Virginia, has items from the Clover Site in the Adams collection. Sunrise Museum in Charleston also has artifacts from the Clover Site in the Durrett collection. Marshall University is presently curating the material excavated at the Clover Site by their field school. Additional artifacts collected from sites at the Green Bottom Wildlife Management Area will be curated at the Blennerhassett Historical Park Commission.

BURIED SITES

The archeological survey of the Green Bottom Wildlife Area consisted of surface inspection and limited shallow testing. The Huntington soils along the river bank do have potential for buried archeological deposits. Several of these areas were covered with recent alluvium and produced no surface archeological sites. These areas were not scheduled for development and formal deep testing will be deferred until it is necessary for development.

The Huntington District Geotechnical Branch excavated a series of 51 backhoe trenches to determine if material was suitable for construction of dikes. The locations of these areas were reviewed and arrangements were made to have an archeologist present when backhoe trenches were dug in areas where there was a high probability for locating buried sites or when the trenches were located on recorded archeological sites. Three recorded sites were tested with backhoe trenches: 46CB93, 46CB99 and 46CB100. Fifteen of these backhoe trenches were monitored by an archeologist. Thirteen of the trenches had some form of charcoal present and nine of these had concentrations of charcoal, possible features, or firecracked rock that indicated a high potential for an archeological site.

Radiocarbon samples were collected whenever sufficient charcoal was present. Three samples were dated to develop a better understanding of the age of the deposits and potential for locating buried archeological sites.

Sample #2, Test Pit #46, located on 46CB99, consisted of 8.40 grams of black walnut shell taken from a charcoal pocket .9 to 1.0 meters deep. The date (Beta-32012) is 3410+/-80 BP (1460 BC) which is calibrated to 1737 BC.

Sample #4, Test Pit #12, consisted of 8.62 grams of wood charcoal (possibly mulberry) taken from a depth of .9 to 1.0 meters. The date (Beta-32013) is 770+/-80 BP (AD 1180) which is calibrated to AD 1262. A firecracked rock was collected from a depth of 2.0 meters. Another charcoal sample was taken from a depth of 3.5 meters but was too small to date using conventional methods.

Sample #8, Test Pit #31, consisted of 17.4 grams of wood charcoal (black locust and ash) taken from a feature at a depth of 1.7 meters. The feature was located in the wall of the trench. It had firecracked rock and a charcoal layer approximately 15 cm thick. The date (Beta-32014) is 1280+/-60 BP (AD 670) which is calibrated to AD 689. The feature was probably a baking oven which was common during the Late Woodland period.

These areas were not recorded as archeological sites because they were uncovered in geological test pits and boundaries for the sites could not be determined. Also temporal and cultural affiliation could not be determined on the basis of the limited material found in the features.

MANAGEMENT OF ARCHEOLOGICAL SITES

The Green Bottom Wildlife Management Area presents an excellent opportunity for the preservation and management of a significant body of archeological data. The area is relatively small (836 acres) but it will have a full time Wildlife Manager who lives on site and has the authority to enforce state and Federal preservation laws.

Green Bottom has received much publicity in the news media and the public is aware of the significant archeological resources in the area. This will help curtail the unauthorized excavations which were previously done on the Clover Site and the adjacent Fort Ancient village.

Besides enforcement of state and Federal historic preservation laws, the management plan for the Green Bottom archeological sites will address four general areas of impacts: research, river bank erosion, vegetation and wildlife.

Research on archeological sites in the Green Bottom Wildlife Management Area will be encouraged. However, because six of the sites will be placed on the National Register of Historic Places and all of the sites are in Federal ownership, excavations will not be permitted unless applicants provide a detailed research design that is based on the theoretical and substantive knowledge of the discipline (Butler 1987:821). Applicants will also have to demonstrate adequate funding and the ability to carry the project to completion.

The riverbank is actively eroding along portions of the Clover Site. Plantings of willow along the bank have been included in the Green Bottom landscaping contract. The bank along the upstream portion of the site has stabilized. Erosion will be monitored and if it continues to increase the riverward portion of the site will be excavated or a biomechanical solution to the erosion problem will be developed.

Vegetation can be both detrimental and beneficial to archeological sites. Trees can be very damaging to sites because the root systems tend to obscure features and stratigraphy. Plowing exposes sites to intensive surface collecting, increased erosion and can damage or destroy shallow features.

The Clover Site (46CB40) and the Fort Ancient village (46CB98) will be periodically mowed to control trees and herbaceous vegetation. No plowing will be permitted without the written permission of the West Virginia Historic Preservation Officer and the Huntington District, U.S. Army Corps of Engineers.

Plowing or other types of disturbance will not be permitted on the Jenkins House Site (46CB41). It will be maintained as a lawn. Any new construction on the site will have to be approved by the West Virginia State Historic Preservation Officer and the Huntington District.

Plowing will be permitted on the other sites but will be restricted to a depth of eight inches (20 cm), the approximate depth of the present plow zone. The use of chisel plows and V-rippers is specifically prohibited.

The Green Bottom Development Plan includes extensive plantings of trees to break up large agricultural fields and to produce diversified habitat for wildlife. These plantings

have been designed to avoid all National Register sites. Some plantings will occur on low density archeological sites but these sites do not qualify for the National Register and this will not have an impact on the the overall archeological data base in the project area.

Wildlife, especially burrowing animals, can have a detrimental impact on archeological sites. Groundhogs pose a potential problem at the Clover Site. The site will be inspected at least once a year and the groundhog population will be reduced if damage increases.

MANAGEMENT OF JENKINS HOUSE

The rehabilitation of the Jenkins House will begin in the fall of 1990 and be completed by the summer of 1991.

The house will be used as a residence and office for the DNR Wildlife Manager until the West Virginia Division of Culture and History receives funding to occupy, maintain and interpret the house. Routine maintenance will be the responsibility of the West Virginia Department of Natural Resources. No major repairs will be undertaken at the house without the prior approval of the West Virginia State Historic Preservation Officer and the Huntington District, U.S. Army Corps of Engineers.

INTERPRETATION

The type of historical and archeological interpretive programs developed for the Green Bottom Wildlife Management Area will be dependent upon which agency manages the Jenkins House. Living history programs, tours, museums and Civil War Libraries are only feasible if the West Virginia Division of Culture and History leases and restores the Jenkins House.

Other programs can be developed for Green Bottom such as brochures, videos, historical and archeological publications. There are several journals and magazines such as West Virginia Archeologist, Goldenseal, Wonderful West Virginia and West Virginia History that would be appropriate for publishing the Green Bottom information.

The Huntington District, U. S. Army Corps of Engineers, has a 20 minute video, Native American Foods and Crafts, that would be appropriate for interpretive programs. Capitol High in Charleston is preparing a 20 minute video on West Virginia archeology which may also be available for interpretive programs.

Exhibitions of the Clover artifacts and other archeological and historical materials can be developed by Marshall University and the Huntington Museum of Art. These exhibitions do not necessarily have to take place at Green Bottom but can be staged at appropriate places in the Huntington area.

Signs could be erected to explain various historical and archeological aspects of the project area.

Besides the historical and archeological aspects of the Green Bottom Wildlife Management Area, publications, videos and brochures should stress the preservation and conservation of the historical and archeological resources.

BIBLIOGRAPHY

- Adams, John J.
1960 A fluted Point from Cabell County, West Virginia.
West Virginia Archeologist 12:24-25.
- Adams, John J. and S.F. Durrett
1952 Fort Ancient(?) Art in Cabell and Mason Counties.
West Virginia Archeologist 5:24.
- Anonymous
n.d. "The Ghost of General Jenkins"
- 1853 "600 Acres Valuable Land for Sale." *Guyandotte Herald*, December 23, 1853, p. 4.
- 1862 *An Early Voyage on the Ohio*, Lambert Papers, Cabell County Public Library. "Chapter III, From Gallipolis to North Bend," pg. 96-97.
- 1895 "In Upper Greenbottom: Some of the Garden Spots of Cabell County." *Huntington Advertiser*, November 7, 1895.
- 1959 "Greenbottom Mansion Broods Over Bygone Days." Sesquicentennial Edition, *Herald-Dispatch*, 25 June 1959
- 1989 Jenkins Homestead Turns Into a Hot Potato for U.S. Engineers, Huntington. *S&D Reflector*, Marietta, Ohio, Vol. 6, No. 1, March 1989.
- Butler, William B.
1987 Significance and other Frustrations in the CRM Process. *American Antiquity* 52(4):820-829.
- Dent, R.
1981 Amerind Society and the Environment: Evidence from the Upper Delaware Valley. In *Anthropological Careers, Perspectives in Research, Employment and Training*.
- Dickenson, Jack L.
1988 *Jenkins of Greenbottom: A Civil War Saga*. Pictorial Histories Publishing Company, Charleston, West Virginia.

- Faller, Harold
 1929 "War Tradition Clings to Home in Greenbottom,"
 Huntington *Herald-Advertiser*, August 25, 1929.
- 1934 "Albert Gallatin Jenkins, A Confederate
 Portrait.", from Roy Bird Cook Papers, West Vir-
 ginia University, Pg. 13-17. Published in *W.Va.
 Review*, May 1934.
- Fredlund, Glen G.
 1989 Holocene Vegetational History of the Gallipolis
 Locks and Dam Project Area, Mason County, West
 Virginia. Report prepared for U.S. Army Corps of
 Engineers, Huntington District. Cultural Resource
 Analysts, Inc. Contract Publication Series 89-01.
- Freidin Nicholas
 1987 Report on the Investigations of Clover (46-CB-40),
 West Virginia, by the Marshall University Ar-
 cheological Field School. Report submitted to
 West Virginia State Historic Preservation Office,
 Charleston.
- Fritts, H. C., G. R. Lofgren and G.A. Gordon
 1979 Variation in Climate Since 1602 as Reconstructed
 from Tree-Rings. *Quaternary Research* 12:18-46.
- Gioulis, Michael
 1988 Report on the Rehabilitation of the General A.G.
 Jenkins House, Greenbottom, West Virginia. Report
 prepared for the U.S. Army Corps of Engineers,
 Huntington District.
- 1989 Report on the Interior Paint Colors of the General
 A.G. Jenkins House, Greenbottom, West Virginia.
 Report prepared for the U.S. Army Corps of En-
 gineers, Huntington District.
- Graybill, Jeffrey R.
 1981 The Eastern Periphery of Fort Ancient (AD 1050-
 1650): A Diachronic Approach to Settlement
 Variability. Ph.D. Dissertation, University of
 Washington, Seattle.

- Griffin, James B.
 1943 The Fort Ancient Aspect, Its Cultural and Chronological Position in Mississippi Valley Archeology. University of Michigan Press. (Reprinted: *University of Michigan Museum of Anthropology, Anthropological Papers 28, Ann Arbor, 1966*).
- Hughes, Myra A. and Jonathan P. Kerr
 1990 A National Register Evaluation of Selected Archeological Sites in the Gallipolis Mitigation Site at Greenbottom, Cabell County, West Virginia. Report prepared for U.S. Army Corps of Engineers, Huntington District. Cultural Resource Analysts, Inc. Contract Publication Series 90-08.
- Hughes, Myra A. and Charles M. Niquette (eds)
 1989 A National Register Evaluation of the Jenkins House Site and a Phase One Inventory of Archeological Sites in the Gallipolis Mitigation Site at Greenbottom, Cabell County, West Virginia. Report prepared for U.S. Army Corps of Engineers, Huntington District. Cultural Resource Analysts, Inc., Contract Publication Series 89-12.
- MacDonald, F.A.
 n.d. Corrections and Additions to the Remarks of F.A. MacDonald concerning *Homestead, The Old Jenkins Mansion*.
- Maslowski, Robert F.
 1984 Protohistoric Villages in Southern West Virginia. In *Upland Archeology in the East, Symposium 2*, James Madison University, Harrisonburg, Virginia.
- Mayer-Oakes, William J.
 1954 Fort Ancient Relationships to the Late Prehistoric Occupation of the Upper Ohio Valley. Unpublished Ph.D. Dissertation, Department of Anthropology, University of Chicago.
- 1955 Prehistory of the Upper Ohio Valley. *Annals of Carnegie Museum*, Vol. 34, Pittsburgh, Pennsylvania.

- McMichael, Edward V.
 1960 Another "Pottery Pestle" from the Waterworks Site,
 Hamilton County, Ohio. *West Virginia Archeologist*
 12:17-21.
- Sawrey, Robert
 1989 "Report on Sites 46CB100 and 46CB103," June 20,
 1989.
- Sedinger, James D.
 n.d. Excerpt from James D. Sedinger's diary, taken from
 Roy Bird Cook Papers, West Virginia University, p.
 42, 44, 60.
- Shott, Michael J.
 1990 Childers and Woods: Two Late Woodland Sites in the
 Upper Ohio Valley, Mason County, West Virginia.
 University of Kentucky Program for Cultural
 Resource Assessment, Archeological Report 200.
- Teel, Cora P.
 1977 Memorandum of Conversation with Mr. E.E. Lemmons,
 concerning Margaret Jenkins, 1 September 1977.
- Wallace, George S.
 1935 Cabell County Annals and Families. Garret &
 Massie, Richmond. pp. 5-7, 416-419.
- Wilkins, Gary R.
 1974 Archeological Survey and Test Excavations in
 Cabell County, West Virginia. Manuscript on file
 at the Archeology Section, West Virginia Geologi-
 cal and Economic Survey, Morgantown, West Vir-
 ginia.

APPENDIX I

Figures

OHIO

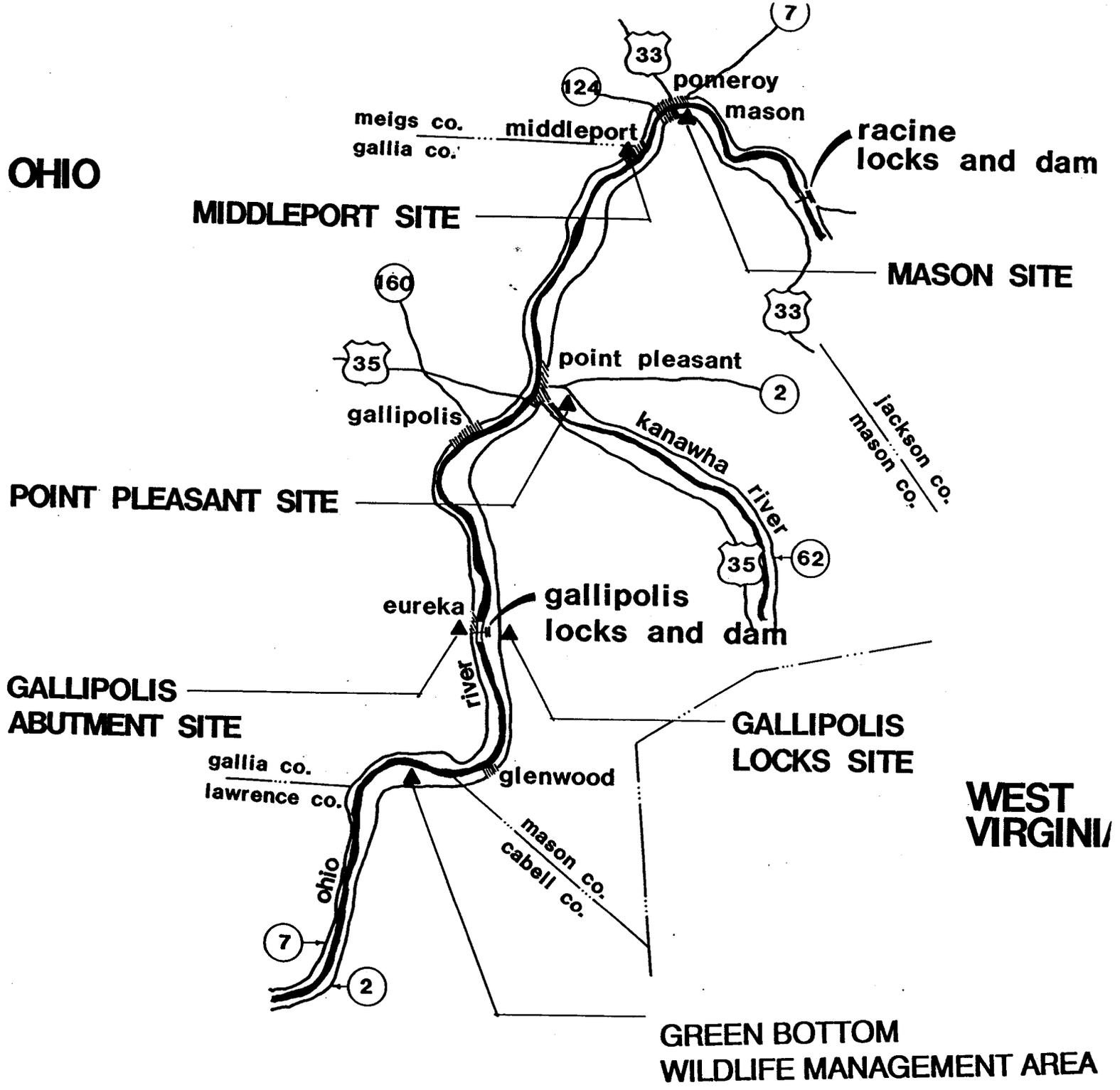


Figure 1. Location Map.



Figure 2. Green Bottom, December 23, 1906. Jenkins House is to the left of photo.

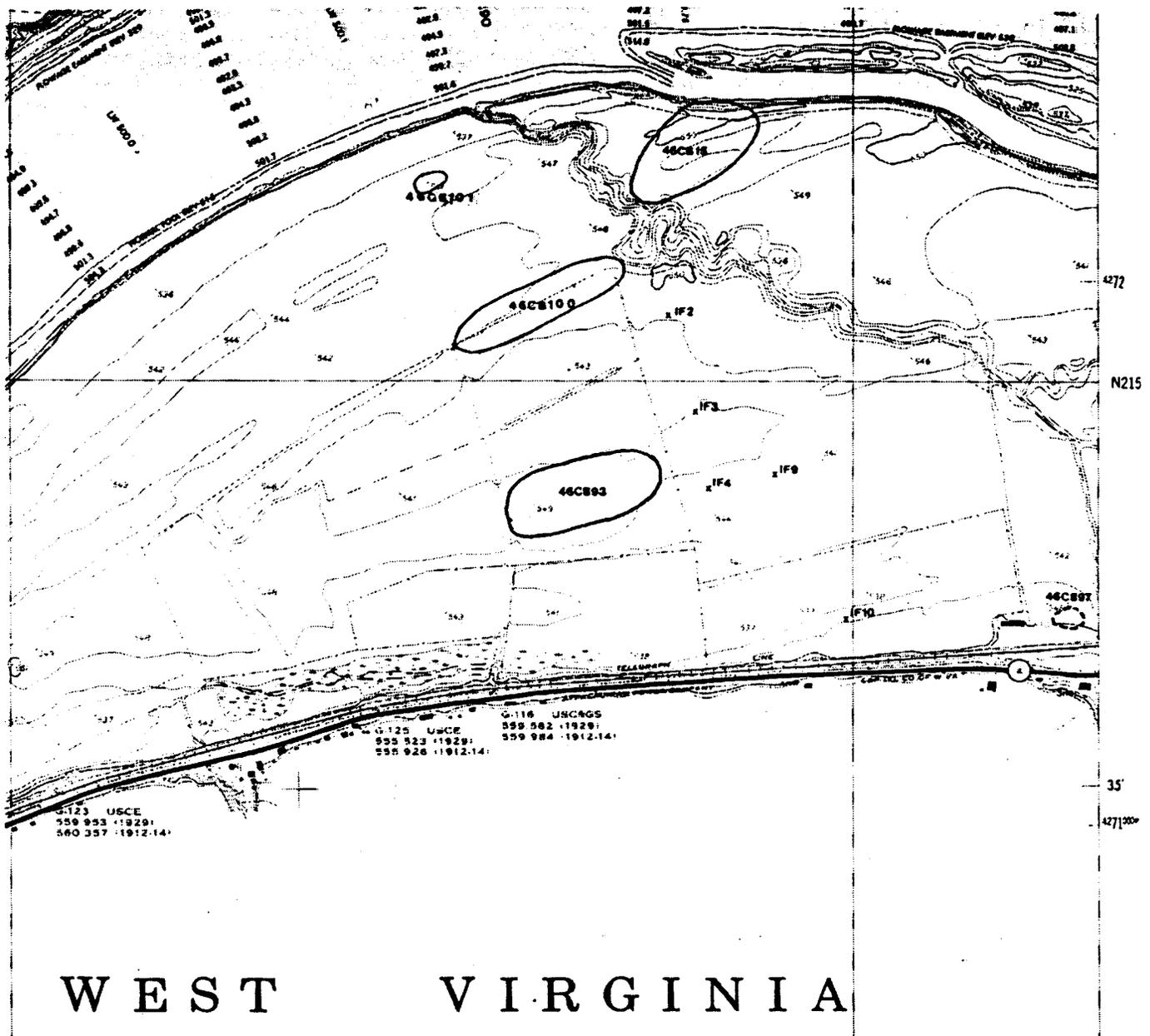


Figure 3. Topographic map showing locations and boundaries of sites discussed.

APPENDIX II
Memorandum of Agreement

Advisory Council On Historic Preservation

The Old Post Office Building
1100 Pennsylvania Avenue, NW, #809
Washington, DC 20004

MEMORANDUM OF AGREEMENT

WHEREAS, the Army Corps of Engineers (Corps) has determined that replacement and relocation of the locks at the Gallipolis Dam, Mason County, West Virginia, will have an effect upon properties included in or eligible for inclusion in the National Register of Historic Places and has requested the comments of the Advisory Council on Historic Preservation pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. 470) and its implementing regulations, "Protection of Historic and Cultural Properties (36 CFR Part 800);" and

WHEREAS, the Corps has agreed to acquire and deed to the West Virginia Department of Natural Resources (DNR) an 884 Acre tract downstream from the Gallipolis Dam known as the Lesage/Greenbottom swamp as a wildlife mitigation site;

NOW, THEREFORE, the Corps, the West Virginia State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (Council) agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

Stipulations

The Corps will ensure that the following measures are carried out:

I. Gallipolis Canal and Disposal Area:

A. Archeological Data Recovery

1. Prior to the initiation of any construction or other land-disturbing activities, archeological sites 46MS99, 46MS103 and 46MS113 will be tested to determine their eligibility for inclusion in the National Register of Historic Places. If these sites are determined eligible by the Corps, they will be incorporated into the data recovery plan discussed in Stipulation A.2. below.

2. A detailed data recovery plan that addresses substantive local, regional, and inter-regional research problems will be developed for archeological sites 46MS14, 46MS110, 46MS112, and 46MS121 (and sites 46MS99, 46MS103, and 46MS113 if found to be significant in accordance with Stipulation A.1. above). The plan will be based on both the previous surveys and testing results from the area, and will be prepared with reference to the standards contained in the Council's Handbook, Treatment of Archeological Properties (Attachment 1), and the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (Attachment 2). The plan shall include provisions for radiocarbon dating and other specialized analyses of samples from other related archeological sites in the Huntington District.

3. The data recovery plan will be submitted to the West Virginia SHPO and the Council for review prior to implementation. If neither party objects within 15 working days after receipt of the plan, the plan will be implemented. If either party objects to the plan, the Corps will consult with the Council and the West Virginia SHPO to resolve the objections.

4. The size and extent of the archeological excavations will be of sufficient intensity to address the research questions posed in the data recovery plan.

B. Site Avoidance

1. Archeological site 46MS114, which lies adjacent to the disposal area, will be clearly identified as off limits and every effort will be made to avoid disturbance to the site.

II. The Lesage/Greenbottom Mitigation Site

1. After acquisition by the Corps but prior to transfer to the West Virginia DNR, the Lesage/Greenbottom Mitigation Area will be subject to an archeological and historic resource survey by the Corps. In consultation with the West Virginia SHPO, archeological and historical sites located by the survey (including known archeological sites 46CB15, 46BC40, and 46BC41) will be evaluated to determine their eligibility for the National Register. Sites considered to be eligible for the National Register will be formally nominated to the Register by the Corps. The archeological survey will be conducted in accordance with the standards and guidelines contained in the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (Attachment 2).

2. In consultation with the West Virginia SHPO, the Council for West Virginia Archeology, and the West Virginia DNR, the Corps will develop an Historic Preservation Management Plan for the

historic and archeological resources of the Mitigation Area. This plan will be based on the archeological and historic resource survey conducted in accordance with stipulation II.1 above, and will correlate this information with anticipated use(s) of the area by the West Virginia DNR. The plan will also include priority lists of significant resources that should be left in place, resources that should be subject to data recovery or other form of mitigative measures prior to any action that would have an effect on the site(s), and provisions for public interpretation of the prehistory and history of the area.

3. The Historic Preservation Management Plan described above in stipulation II.2 will be submitted to the West Virginia SHPO and the Council for review and comment prior to implementation. If neither party objects within 15 days after receipt of the Management Plan, the Plan will be implemented. If either party objects to the plan, the Corps will consult with the objecting party to resolve the objection.

4. In consultation with the West Virginia SHPO and DNR, the Corps will rehabilitate the General Albert Gallatin Jenkins House in accordance with "The Secretary of the Interior's Standards for Rehabilitation and Guidelines for the Rehabilitation of Historic Buildings" (Standards) (Attachment 3), prior to its use by the West Virginia DNR as the Lesage/Greenbottom operations office. The Corps will also place in the land transfer deed a covenant ensuring the preservation of the structure and requiring that all further rehabilitation will be carried out in accordance with the Standards.

III. Additional Stipulations

1 All archeological work will be conducted under the direct supervision of an archeologist(s) who meets, at a minimum, the appropriate qualifications set forth in 36 CFR Part 66, Appendix C (Attachment 4).

2. Copies of the final report will be supplied to the West Virginia SHPO, the Ohio SHPO, the Council, and the National Park Service for possible submission to the National Technical Information Service (NTIS).

3. If any of the signatories to this Agreement determines that the terms of the Agreement cannot be met, or believes a change is necessary, that signatory shall immediately request the consulting parties to consider an amendment or addendum to the Agreement. Such an amendment or addendum shall be executed in the same manner as the original Agreement.

Execution of this Memorandum of Agreement evidences that the Corps has afforded the Council a reasonable opportunity to comment on this undertaking and that the Corps has taken into account the effects of its undertaking on historic properties.

[Signature] (date) 22 DEC 8
Advisory Council on Historic
Preservation

[Signature] 18 05 1986
(date)
Army Corps of Engineers

[Signature] (date) 11/6/86
West Virginia State Historic
Preservation Officer

APPENDIX III

Memorandum of Understanding

APPENDIX III



DEPARTMENT OF THE ARMY
HUNTINGTON DISTRICT, CORPS OF ENGINEERS
502 EIGHTH STREET
HUNTINGTON, WEST VIRGINIA 25701-2070

REPLY TO
ATTENTION OF:

MEMORANDUM OF UNDERSTANDING OF GREENBOTTOM

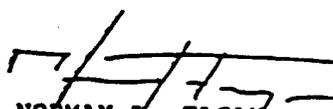
1. The principal purpose of the U.S. Army Corps of Engineers' ownership of an 836-acre site known as Glenwood Bend, is to mitigate for lost wildlife habitat at the Gallipolis Locks replacement construction site.
2. The West Virginia Department of Natural Resources has leased the Glenwood Bend site from the U.S. Army Corps of Engineers and is responsible for wildlife and habitat management, public safety, protection of historic and prehistoric features, and managing public interpretation of the area.
3. All parties agree in principle that the historic Jenkins House located on the site and the property immediately surrounding it, as mutually agreed by the undersigned, should be available for public interpretation. This can be best accomplished by the West Virginia Department of Culture and History. Such property shall consist of approximately four acres immediately surrounding the Jenkins House under the management of Culture and History. The Department of Natural Resources will manage an additional non-hunting area surrounding the four acres. That area also will be available for programming by Culture and History in concert with the Department of Natural Resources.
 - a. Subject to funding, the Department of Culture and History agrees to explore the possibility of subleasing the Jenkins House from the Department of Natural Resources with the purpose of restoring the property to an appropriate historic period and making it available for public interpretation and programming.
 - b. The Department of Culture and History will provide a plan for the management of the Jenkins home through the Department of Natural Resources to the Corps of Engineers for approval. This plan will identify who will occupy the property and to what degree initial public use can be made available. The plan also will provide a guideline for eventual restoration and full public use of the home after rehabilitation by the Corps. The plan will be subject to approval by the signers of the Memorandum of Agreement on the historic properties at the Glenwood Bend mitigation site. Signers are the National Advisory Council on Historic Preservation, the U.S. Army Corps of Engineers and the West Virginia State Historic Preservation Officer.

APPENDIX III

c. If the Department of Culture and History does not have the initial management plan approved when occupancy is available, the Department of Natural Resources will occupy and protect the property until a satisfactory management plan is available.

4. The Department of Natural Resources will ensure that the Jenkins House will be immediately occupied when available.


J. EDWARD HAMRICK III
Director of Department
of Natural Resources


NORMAN L. FAGAN
Commissioner of
Culture and History


THOMAS E. FAREWELL
Colonel, Corps of
Engineers
District Engineer